RTCA Special Committee 186, Working Group 6

ADS-B MASPS, Revision A

Meeting 6

Needed Minor Editorial Changes to SV and MS Tables

(Presented by Jerry Anderson and J. Stuart Searight)

SUMMARY

This paper requests a more concise manner to define required SV and MS elements and documents a series of minor editorial corrections needed DO-242A. These corrections all occur in the Tables defining required State Vector and Mode Status elements and the text introducing them. These corrections are needed because apparently temporary table names used while DO-242 was originally being developed, and new tables were created late in the development process. The temporary table names are still found in introductory text, and such text does not exist for some tables.

It is suggested that this material be appended to Issue Paper 33 and is resolved when IP33 is addressed.

Introduction

The minor editorial changes requested below resulted in observations while attempting to interpret Table 3-9. Table 3-9 defines the required State Vector and Mode-Status elements to be transmitted for Class B equipment <u>for particular applications</u>. There is not, however, a comprehensive table that lists the entire set of required SV and MS elements. It is proposed that consolidation of these requirements should be part of the work to resolve Issue Paper 33.

Change #1 (Page 78)

3.3.2 Information Exchange Requirements By Equipage Class

In the first two paragraphs of 3.3.2 there are at least 3 references to Table 3-3, however there is now a Table 3-3(a) and Table 3-3(b), but no Table 3-3.

Change #2 (Page 94)

3.4.1 Report Assembly Design Considerations

Three report types are defined as ADS-B outputs to applications. They provide flexibility in meeting delivery and performance requirements for the information needed to support the operations identified in Section 2. Report types, also shown in <u>Figure 3-8</u>, are:

- Surveillance State Vector Report (SV)
- Mode/Status Report (MS)
- On-condition Report (OC)

All interactive participants must receive messages and assemble reports specified for the respective equipage class (Table 3.3-23-3(a)). All receive-only participants must receive messages and assemble reports as specified for the respective equipage class (Table 3-3(b)). All transmitting participants must output at least the minimum data for the SV and partial MS reports. The minimum requirements for exchanged information and report contents applicable for equipage classes are provided in Section 3.4.4.

Change #3 (Page 100)

3.4.4.1 Interactive Aircraft/Vehicles Subsystems (Class A)

<u>Table 3.4-43-8(a)</u> defines requirements for the contents of ADS-B reports to be provided by each Class A equipment. <u>Table 3-8(b)</u> defines requirements for minimum information to be broadcast by Class A equipment.

Change #4 (Page 101)

Note #2 after Table 3-8(a):

2. *Numbers (#) refer to data elements in Tables* 3.4-1, 3.4-2, and 3.4-33-5, 3-6, and 3-7.

Change #5 (Page 102)

Note #1 after Table 3-8(b):

1. Message content required to support report Element # in Tables 3.4 1, 3.4 2, and 3.4 33-5, 3-6, and 3-7. Only the appropriate information need be broadcast.